

## REMARKS

This Amendment is submitted in response to the non-final Office Action mailed on December 11, 2008. The Director is authorized to charge any fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112857-037 on the account statement.

As previously provided, claims 26-36 have been presented for purposes of examination. Further, claim 37 has been newly added. Applicants believe the present claims should be considered distinguished from the cited art of record, even if properly combinable, namely US 5,772,934 to MacFadden ("MacFadden"), US 5,522,127 to Ozaki et al. ("Ozaki"), and EP 0,724,305 A1 to Akashi ("Akashi").

Of the pending claims at issue, claim 26 is the sole independent claim. Claim 26 is directed to a gel electrolyte secondary cell and recites a positive electrode; a negative electrode comprising a current collector and a powder mixture composed of a graphite material having a specific surface area that ranges from  $0.1 \text{ m}^2/\text{g}$  to  $3.6 \text{ m}^2/\text{g}$ ; and a gel electrolyte comprising an electrolyte salt, a non-aqueous solvent and a high-molecular weight material, wherein the non-aqueous solvent comprising propylene carbonate and ethylene carbonate, and wherein a content of propylene carbonate ranges from 10 mol% to 75 mol% as fully supported in the specification.

Applicants have demonstrated that a gel electrolyte secondary cell with a negative electrode including a graphite material (e.g., a graphite material obtained from meso-carbon mirco beads as further defined in claim 34) combined with a gel electrolyte including propylene carbonate and ethylene carbonate displays enhanced properties as compared to gel electrolyte secondary cell that includes a negative electrode made from a different graphitized carbonaceous material (e.g., petroleum coke). The gel electrolyte secondary cell as claimed undergoes discharge capacity loss to a lesser extent to realize a large discharging capacity and a high charging/discharging efficiency, even if propylene carbonate is contained in the gel electrolyte and powders of the graphitized material are of reduced particle size to such an extent that the impedance can be suppressed sufficiently. Applicants specification, page 24.

In contrast, the primary MacFadden and Akashi references generally disclose carbonaceous materials as used for a negative electrode material. See, Akashi, p. 4, lines 12-16; and MacFadden, col. 4, lines 9-15. However, nowhere is a clear distinction made that one type of carbonaceous material performs better than another, let alone the specific type of graphite material as claimed and further defined in claim 34. Again, Applicants have demonstrated that a

gel electrolyte secondary cell with a specific graphite material as claimed and in combination with a propylene carbonate/ethylene carbonate based gel electrolyte display enhanced properties as compared to a gel electrolyte secondary cell with a negative electrode that includes a different type of carbonaceous material as previously discussed. Therefore, the MacFadden and Akashi references, alone or even if combinable, are distinguished from the claimed invention.

Even assuming the primary references are combinable with the Ozaki reference, the combined teachings are not sufficient in scope such that one skilled in the art would be inclined to favor one type of carbonaceous material for another, let alone favor the specific type of graphite material as claimed. Again, the primary references do not place any distinction as to the type of carbonaceous material used as previously discussed. Further, the focus of Ozaki is directed to mesophase graphite particles as the negative electrode of a non-aqueous electrolyte secondary cell utilizing a nonaqueous electrolyte. Again, the test results in the present application demonstrated enhanced performance of the graphite obtained from meso-carbon micro-beads as compared to a different carbon material (e.g., one derived from petroleum coke) in a gel electrolyte evaluation cell. Considering that the primary references are directed to gel electrolyte (Akashi) and solid polymer electrolyte (McFadden) cells and do not place any emphasis on the type of negative electrode material, even including reference to a variety of different carbonaceous material, and further that Ozaki is merely directed to a mesophase graphite particles as the negative electrode of a non-aqueous secondary cell, one skilled in the art would not have sufficient guidance to preferentially select the mesophase material of Ozaki in contrast to the present application that has demonstrated enhanced performance of the claimed graphite material as compared to other types of carbon-based material as previously discussed. Moreover, none of the cited art provides sufficient guidance that the claimed negative electrode material of a gel electrolyte secondary cell in combination with ethylene carbonate and propylene carbonate displays enhanced properties. Again, Ozaki merely relates to mesophase graphite particles in a non-aqueous electrolyte secondary cell and further suggests that propylene carbonate is disfavored with a meso-carbon based material.

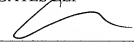
Further, claim 35 is rejected under 35 U.S.C. § 112, first paragraph. In response, Applicants refer the Patent Office to paragraph 3 on page 3 of Applicants' specification. Therefore, Applicants believe the rejection should be withdrawn in view of same.

For at least the foregoing reasons, Applicants respectfully submit that the present application is in condition for allowance and earnestly solicit reconsideration of same.

Respectfully submitted,

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